

Form PTO-1449

ATTY DOCKET NO.: 10-98 G	SERIAL NO.: 09/688,055	FILING DATE: 10/13/00
APPLICANT(S): Holl, M.R. et al.		GROUP ART UNIT: 1743

Originally filed in 09/080,691

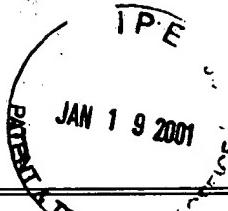
U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
(B)	4,726,929	02/23/88	Gropper et al.	422	68	
	4,894,146	01/16/90	Giddings	209	12	
	4,908,112	03/13/90	Pace	204	299 R	
	4,963,498	10/16/90	Hillman et al.	436	69	
	4,983,038	01/08/91	Ohki et al.	356	246	
	5,007,732	04/16/91	Ohki et al.	356	73	
	5,141,651	08/25/92	Giddings	210	748	
	5,240,618	08/31/93	Caldwell et al.	210	748	
	5,250,263	10/05/93	Manz	422	81	
	5,288,463	02/22/94	Chemelli	422	58	
	5,376,252	12/27/94	Ekström et al.	204	299 R	
	5,480,614	01/02/96	Kamahori	422	70	
	5,500,071	03/19/96	Kaltenbach et al.	156	272.8	
	5,585,069	12/17/96	Zanzucchi et al.	422	100	
	5,599,503	02/04/97	Manz et al.	422	82.05	
	5,627,041	05/06/97	Shartle	435	7.24	
	5,637,469	06/10/97	Wilding et al.	435	7.21	
	5,639,423	06/17/97	Northrup et al.	122	50	
	5,674,743	10/07/97	Ulmer	435	287.2	
	5,681,484	10/28/97	Zanzucchi et al.	216	2	
	5,716,852	02/10/98	Yager et al.	436	172	
	5,726,751	03/10/98	Altendorf et al.	356	246	
(B)	5,748,827	05/05/98	Holl et al.	385	134	

Kelli Bers 1/25/03

JAN 19 2001

I.P.E.



Form PTO-1449

ATTY DOCKET NO.: 10-98 G

SERIAL NO.: 09/688,055

FILING DATE: 10/13/00

APPLICANT(S): Holl, M.R. et al.

GROUP ART UNIT: 1743

Originally filed in 09/080,691

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No
(S)		WO 96/04547	15.02.96	PCT	G01N	27/00	
		WO 96/14934	23.05.96	PCT	B01L	3/00	
		WO 97/02357	23.01.97	PCT	C12P	19/34	
		WO 97/39338	23.10.97	PCT	G01N	21/64	
		0 294 701 B1	02.09.92	EPO	G01N	15/14	
		0 381 501 B1	08.06.94	EPO	C12Q	1/68	
		0 288 029 A2	26.10.88	EP	G01N	21/05	
		25 21 236 A1	18.11.76	DT	G01N	15/00	NO
(S)		0 645 169 A1	29.03.95	EPO	B01D	21/00	NO

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

(S)		Elwenspoek, M. et al. (1994) "Towards integrated microliquid handling systems" <i>J. Micromech. Microeng.</i> 4:227-243
		Gravesen, P. et al. (1993) "Microfluidics - a review" <i>J. Micromech. Microeng.</i> 3:168-182
		Kikuchi, Y. et al. (1992) "Optically accessible microchannels formed in a single-crystal silicon substrate for studies of blood rheology" <i>Microvas. Res.</i> 44:226-240
		Manz, A. et al. (1993) "Planar chips technology for miniaturization of separation systems: A developing perspective in chemical monitoring," <i>Advances in Chromatography</i> , Vol 33, Ch. 1, Pp. 1-67
		Miyake, R. et al. (1991) "A development of microsheath flow chamber" <i>Proceedings of the IEEE MicroElectro Mechanical Systems Workshop</i> 265-270.
		Petersen, K.E. (1982) "Silicon as a mechanical material" <i>Proceedings of the IEEE</i> 70(5):420-457
		Shoji, S. and Esashi, M. (1994) "Microflow devices and systems" <i>J. Micromech Microeng.</i> 157-171
(S)		Sobek, D. et al. (1993) "A microfabricated flow chamber for optical measurements in fluids" <i>Proceedings of the IEEE MicroElectro Mechanical Systems Workshop</i> 219-224

Natalie Ben 1623103



Form PTO-1449		
ATTY DOCKET NO.: 10-98 G	SERIAL NO.: 09/688,055	FILING DATE: 10/13/00
APPLICANT(S): Holl, M.R. et al.		GROUP ART UNIT: 1743

Originally filed in 09/080,691

		<i>Sobek, D. et al. (1994) "Microfabricated fused silica flow chambers for flow cytometry" Proceedings of Solid-State Sensors and Actuators Workshop, Hilton Head, SC</i>
<i>G</i>		<i>Verpoorte, E. et al. (1992) "A silicon flow cell for optical detection in miniaturized total chemical analysis systems" Sensors and Actuators 8:66-70</i>
<i>I</i>		<i>Verpoorte, E. M. J. et al. (1994) "Three-dimensional micro flow manifolds for miniaturized chemical analysis systems" J. Micromech. Microeng. 4:246-256</i>
<i>Cs</i>		<i>Wilding, P. et al. (1994) "Manipulation and flow of biological fluids in straight channels micromachined in silicon" Clin. Chem. 40(1):43-47</i>

12/20/89

DATE CONSIDERED

✓25103

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89

卷之三

卷之二



Form PTO 1449			
ATTY DOCKET NO. 10-98G	SERIAL NO. 09/688,055	FILING DATE 10/13/00	
APPLICANT Holl et al.		GROUP 1743	

Originally filed in 09/080,691

U.S. PATENT DOCUMENTS

Exmr. Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
CS		5,707,799	01/13/98	Hansmann et al.	435	6	
(5,863,502	01/26/99	Southgate et al.	422	58	
(5,919,711	07/06/99	Boyd et al.	436	178	
		5,755,942	05/26/98	Zanzucchi et al.	204	454	
		5,147,607	09/15/92	Mochida	422	57	
↓		5,744,366	04/28/98	Kricka et al.	436	63	
BS		5,500,187	03/19/96	Deoms et al.	422	58	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No

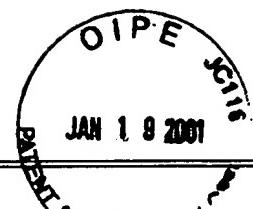
OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89



Form PTO 1449							
ATTY DOCKET NO. 10-98G		SERIAL NO. 09/688,055		FILING DATE 10/13/00			
APPLICANT Holl et al.				GROUP 1743			

Originally cited by Examiner in 09/080,691

U.S. PATENT DOCUMENTS

Exmr. Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
(S)		5,601,727	2/97	Bormann et al.	210	767	
		5,736,100	4/98	Miyake et al.	422	64	
		5,225,163	7/93	Andrews	422	61	
		5,039,617	8/91	McDonald et al.	436	69	
		5,858,187	2/97	Ramsey et al.	204	452	
		5,976,465	11/99	Luzzana et al.	422	82.03	
(S)		5,665,312	9/97	Sperber et al.	422	81	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes/No

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER	DATE CONSIDERED
Kelli Bay	12/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89



#5

Form PTO 1449			
ATTY DOCKET NO. 10-98G		SERIAL NO. 09/688,055	FILING DATE 10/13/00
APPLICANT Holl et al.		GROUP 1743	

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
(B)	6,176,991	01/23/01	Nordman	204	601	
	6,171,865	01/09/01	Weigl et al.	436	52	
	6,153,073	11/28/00	Dubrow et al.	204	453	
	6,124,138	09/26/00	Woudenberg et al.	436	518	
	6,033,628	03/07/00	Kaltenbach et al.	422	68.1	
	6,073,482	06/13/00	Moles	73	53.01	
	6,027,627	02/22/00	Li et al.	204	603	
✓	5,744,366	04/28/98	Kricka et al.	436	63	
(G)	5,500,187	03/19/96	Deoms et al.	422	58	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
✓	WO 99/29497	17.06.99	PCT	B32B 3/00	31/00	

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.